Job Title: ENGINEERING TECH I - MATERIALS TECHNICIAN - IPR#46035

Agency: Department of Transportation

Closing Date/Time: 11/17/2022 Salary: \$2,695 - \$4,735 Monthly Job Type: Salaried Full Time

County: Lee

Number of Vacancies: 2

Plan/BU: NR916 - Protech Teamsters

This position is a union position; therefore, provisions of the relevant collective bargaining agreement/labor contract apply to the filling of this position.

All applicants who want to be considered for this position <u>MUST</u> apply electronically through the illinois.jobs2web.com website. State of Illinois employees should click the link near the top left to apply through the SuccessFactors employee career portal.

Applications submitted via email or any paper manner (mail, fax, hand delivery) will not be considered.

Agency Mission Statement

The Illinois Department of Transportation is seeking to hire an Engineering Technician I.

The IDOT team works diligently to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity and protect our environment. We are problem solvers and leaders, constantly searching for innovations and improvements in support of our commitment to providing the best multimodal transportation system for Illinois.

Our team fosters a culture of inclusivity. We value diversity and hold ourselves to the highest ethical standards as we work together for a common purpose. Team members frequently collaborate with colleagues and others outside the department to best meet customer needs.

The department offers extensive training and career advancement opportunities.

- As an Engineering Tech I, you have the possibility of promoting to an Engineering Tech II within 18-24 months.
- A possibility of promoting to an Engineering Tech III within 30-36 months.

Engineering Technician I's with the Illinois Department of Transportation work with engineers from diverse backgrounds, experiences, and careers. They are exposed to both external and internal engineering professionals. This program is a unique opportunity to expand your knowledge and career while networking within a vast engineering network. IDOT offers an ideal program to start and expand an engineering career.

Employees also receive a robust benefit package including:

- Monday-Friday work schedule
- Flexible work schedules are available in many program areas.
- · Health, Life, Vision, and Dental Insurance
- Pension Plan
- (10) Weeks paid Maternity/Paternity Leave
- Deferred Compensation Program and other pre-tax benefit programs (Medical/Daycare)
- Employees earn (12) paid Sick Days annually.
- New Employees earn (10) paid Vacation Days their first year of service and can earn up to (25) paid Vacation Days annually.
- Employees earn (3) paid Personal Days annually.
- (13-14) paid holidays annually (based on start date)
- Tuition Reimbursement

We invite qualified applicants to apply to become part of our team. We are confident that you will take pride in serving Illinois and its residents and visitors.

Job Responsibilities

This position is accountable for performing inspection, sampling, testing, and reporting for various construction materials originating in the district.

Geographic Region: 10-County Area Annual Value of Materials Inspected: \$15 -30 Million

Number of Mixture Plants: 66 Number of Aggregate Plants: 125

Number of Laboratory Samples: Physical Test: 100-2,000 Soils: 800-2,000 Bituminous: 100–2,500

This position reports to the District Laboratory Supervisor. No subordinate personnel report to this position. The incumbent of this position may also be assigned to a sub-unit of the Physical Tests Unit or one of the units in the Materials Section including Mixtures Control and Geotechnical. While assigned to a unit other than the Laboratory Unit, the incumbent will report to the appropriate sub-unit head. The Mixtures Control Unit consist of testing hotmix asphalt and concrete. In the Geotechnical Unit, the incumbent would assist in drill unit operations.

The incumbent will perform in an environment of material inspection, sampling, and testing. The incumbent will be utilized by each materials unit to allow for training in the specific responsibilities of each unit and sub-unit. This continuous development program is an attempt to allow for the incumbent's advancement to any unit in the Materials Section. The incumbent will be exposed to a variety of temperatures including inclement weather and possibly construction sites, contractor, and consultant laboratories and quarries. It is possible for this position to assist the drill crew in the winter, which is outdoors where we core our roadways and culverts. There is potential to work in high speed, high volume traffic areas for setup and construction jobs.

A typical problem for the incumbent includes completing tests in a timely and accurate manner. There are a variety of hot-mix asphalt tests which include: volumetrics testing, Hamburg wheel, Illinois Flexibility Index Testing (IFIT), and other tests as determined by the Materials Engineer. This position will also run a variety of tests for aggregates and soils. It is important for this position to relay borderline or out of acceptable limits tests to their supervisor in a timely manner. The greatest challenge to this position is recognizing situations requiring corrective action and then recommending the corrective action to be taken.

(Job Responsibilities continued)

Functions personally performed by the incumbent include: hot-mix asphalt testing and Portland Cement Mixes for producer's plants; performs various tests on samples received from the Physical Tests Unit, Geotechnical Unit, Mixtures Control Unit, local agency, and other outside sources; assists with various tests performed in the casting of pre-stress concrete beams; and assists with project documentation. This position will be performing the lifting of all the necessary materials and running the tests. The incumbent must be able to lift 50 lbs. This position serves in the capacity as directed by the Materials Engineer.

In accomplishing the objectives of this position, the incumbent operates within the following guidelines: American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO), Bituminous Proportioning Manual, Portland Cement Concrete Manual, Aggregate Manual, Soils Manual, and other Illinois Department of Transportation (IDOT) publications. Problems that cannot be resolved by the incumbent are referred to a supervisor for resolutions. The incumbent will be required to take and pass any Quality Control/Quality Assurance (QC/QA) classes they are sent to. Some of the QC/QA classes require overnight stays which can be up to 1 week. The QC/QA classes include 5-day Aggregate, Portland Cement Concrete (PCC) I, II & III, and Hot-Mix Asphalt (HMA) I, II, & III.

Internal contacts include other Bureau of Project Implementation, unit supervisors, and project personnel within the district. Materials personnel include engineering technicians and civil engineers. This position also has contact in other areas of District 2 including but not limited to the Bureaus of Construction and Operations, and other staff throughout the building. Outside contacts include manufacturing superintendents and personnel, local agency inspectors, and consulting engineers. This position also has contact with hot-mix asphalt contractors, Portland cement producers, a variety of geotechnical contractors, and possibly consultants.

The performance of this position is measured by timely and accurate testing of various types of materials. This position requires attention to detail. The incumbent must have the ability to retain information and follow detailed instructions. The incumbent must have the capacity to run tests independently and accurately in a timely manner. They must be able to maintain harmonious relationships with all contacts that operate within this position and the department.

Principal Accountabilities

- 1. Performs adequate inspection, including sampling and testing of material produced in the district.
- 2. Prepares all required documents and reports in a timely and accurate manner.
- 3. Maintains a working relationship with producers' and suppliers' personnel.
- 4. Responsible for proper use of field and laboratory test equipment.
- 5. Serves in capacities as directed by the Materials Engineer.
- 6. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
- 7. Performs other duties as required.

Qualifications

Position Requirements

- Education/Experience
 - Two years of college in civil engineering technology; pre-engineering or a job related technical/science curriculum OR
 - Two years of engineering experience
- · Valid Driver's License
- · Ability to pass QC/QA classes as needed
- Extensive travel within the district and occasional statewide travel
- Outdoor work in a variety of conditions including, but not limited to, production facilities, active construction sites and roads open to traffic
- Must be able to lift 60 lbs.
- Ability to work overtime

Position Desirables

- Experience in performing materials testing
- · Strong oral and written communication skills

Work Hours: 7:00 AM - 3:30 PM with possible night work and weekends

Work Location: 819 Depot Ave Dixon, IL 61021-3546

Office: Office of Highways Project Implementation/Region 2/District 2/Project Implementation

Agency Contact: DOT.CONTACTHR@ILLINOIS.GOV

Job Family: Transportation

APPLICATION INSTRUCTIONS

Use the "Apply" button at the top right or bottom right of this posting to begin the application process.

If you are not already signed in, you will be prompted to do so.

State employees should sign in to the career portal for State of Illinois employees – a link is available at the top left of the Illinois.jobs2web.com homepage in the blue ribbon.

Non-State employees should log in on the using the "View Profile" link in the top right of the Illinois jobs2web.com homepage in the blue ribbon. If you have never before signed in, you will be prompted to create an account. If you have questions about how to apply, please see the following resources:

State employees: Log in to the career portal for State employees and review the Internal Candidate Application Job Aid

Non-State employees: on Illinois.jobs2web.com – click "Application Procedures" in the footer of every page of the website.

The main form of communication will be through email. Please check your "junk mail", "spam", or "other" folder for communication(s) regarding any submitted application(s). You may receive emails from the following addresses:

- donotreply@SIL-P1.ns2cloud.com
- systems@SIL-P1.ns2cloud.com